

REMINISCENCES OF AN ELDERLY ENTOMOLOGIST

By R. P. DEMUTH *

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After the war I specialised in *muralis*. It is a lovely little creature though it is sad how its blues and greens fade away in the cabinet. It has two other merits: that it is found in the daytime and in most attractive places. I had it from the whole length of the south coast, including the yellow/brown form from Dawlish and the strongly marked pale form from Cardiff and of course a long series from the two widely spaced inland cities of Cambridge and Gloucester where I found them to be identical. I often wondered why the variety *impar* should be the only form in these two places but nowhere else. The absence of salt in the atmosphere seemed the only common ground but then the inland villages of Gloucestershire have perfectly normal seaside type *muralis*. I found that late at night it was easy to find *muralis* by walking along shining a Colman light at the walls. Instead of being so difficult to see, they shone out like jewels. To the ignorant it was a completely mad act. I was so performing in Trinity Lane at Cambridge. A policeman was observing from the shadows and came bounding out: "Excuse me sir, what exactly are you doing!" On July 28 (1948) I went to Cork to try for *muralis* there as Dudley Westropp had recorded many interesting varieties in Cork City, Monkstown and Passage. My diary reads, "My experience is now considerable. Generally speaking *muralis*, though it sits on many walls in its haunts, only breeds on very few and these nearly always within a few yards of the sea. If a choice of materials is available, old brick is much the most popular as the brick joints give just the right sites for the larval web. Walls must be at least 6 feet high, low walls however suitable never seem to have the insect and must not be overhung with trees or creepers. Real free-standing walls are much better than retaining walls with earth behind. It will not sit on walls covered with moss and does not normally like sitting on buildings. The insect emerges between 6 and 8 pm (B.S.T.) and can easily be seen when drying its wings. In strong winds or heavy rain it will get what shelter it can under copings and projecting sills. The really good breeding walls I found were between the railway goods yard and the quay for the Fish-guard boat and along the railway and road between the station and Tivoli. Both these walls are quite close to the river. I could not find the lovely *westropi* forms at Monkstown and Passage; owing to the destruction of the old railway wall these seemed to have gone. Most of mine were small, bright green *muralis* type but about a

*Watercombe House, Waterlane, Oakridge, Stroud, Glos. GL6 7PN.

quarter were similar but var. *par*. I found none really approaching var. *impar* but I did get some attractive varieties."

I was then really good. I would take a wall in strips never letting my eyes wander to another strip. A wall six feet high needed three separate searches each of a 2 ft strip. At Tivoli I just missed my bus back with not another for half-an-hour. With time to spare I could really search the wall and see how many I had missed. I had missed none.

In a later year returning through Cork from a family holiday in Galway I decided to give the harbour wall a quick search while my car was being hoisted on board. Halfway along the wall I literally collided with a large elderly man. Silly old fool I thought, why does he not look where he is going? It was Wightman (then of Pulborough)! My eyes glued to wall, his eyes glued to the wall, collision inevitable!

My other interest in my 1948 visit was to obtain the orange Irish form of *sparganii*. This I found in abundance in a small swamp near the sea at Fountainstown near Crosshaven, in lesser reedmace. They were just about to emerge (July 31). While I was collecting the pupae an Irish youth of about 18 came out to me and asked me what I was doing and I showed him the pupae and how they sat in the hollowed-out stem. I had spotted a closed exit hole in a stem in front of me and by way of illustration I cut off the stem and putting my thumb in the right place I said "There is one in here, directly below my thumb" and I split the stem and there it was and the youth crossed himself and bolted for the bank muttering. Of course if it had been *typhae* my thumb would have been in the wrong place and the miracle would have failed!

In mid-September (1948) *fraxini* at Ham Street was all the rage and no collector worth his salt missed the show. The following appears in my diary presumably by word of mouth from Bernard Kettlewell himself: "Kettlewell took 20 *fraxini* here in the fortnight ending on September 17th. Some on sugar, some flying at night round the 12 foot high tops of aspen bushes, which circled down to lower levels in the light of a torch and three sitting on 3" thick aspen trunks in the daytime, on the windward side and in the sun and four feet above ground." I was a late comer. On September 24, 25 and 26 three of us were there. I saw the only *fraxini*, which was on sugar, tried to put my killing bottle over it and rightly missed it. Still on the subject of *fraxini*, Alfred Hedges saw one egg-laying. Eggs were laid on the aspen trunk only four feet from the ground. When Alfred disturbed it, two eggs had been laid in a crack in the bark. And on the subject of *sponsa* and *promissa*, Bernard had found them at Ham Street on oak trunks at the end of July in the previous year, all low down near the ground, *sponsa* right way up, *promissa* upside-down. It was tremendously hot, 90° in the shade and this may have been the reason for their peculiar behaviour

for I always thought that both these insects sat high up in oaks on the branches, and in my youth I had spent many fruitless hours throwing sticks up with the hope of dislodging one.

1949 was Annus Mirabilis! In early March I married Veronica Drake. In the summer the Robinson brothers ran the first m.v. light and it was the year of *lunaris*, *compta* and *blittneri*, though all three had been first found several years earlier.

Veronica was an ideal entomologist's wife. She quickly picked up the technical jargon and learnt her species and was just as keen as I was. When the rain was pouring down and I would say come on let's pack up, she would say let's give it another half-hour and we were often rewarded. She was also a professional and highly skilled electrical engineer so when m.v. lights came along and something went wrong, all I needed was to wait until light was restored.

We spent our honeymoon in the remoter West Indies such as St. Kitts and Dominica, sailing in native schooners from island to island as all the regular shipping had been destroyed in the war and not yet replaced. We climbed up volcanoes through layers of tropical rain forest and tree ferns but, except in Trinidad, saw very few butterflies and moths. We got back on May 24 and by May 27 were staying at the Ferry Inn, Stone (the place of the Hungarian singing frogs) looking for alternative woods for *lunaris*. Some years before Dr. Bull had found larvae he did not recognize nor did anyone else and when the moths emerged they were this rare and exotic-looking insect. How exciting that must have been! When I find some larva I do not recognize it turns out to be *pronuba*! I had taken *lunaris* at Ham Street the previous year but I wanted some more and to show off my skill to my newly-married wife. By then it was reasonably common in the southern part of Ham Street wood and in several other oak woods in the district provided that oak had been felled the previous season and young shoots were growing from the stools. Sugar was the easiest method but it was exciting to watch them in the daytime. They looked exactly like and rested among dead oak leaves on the ground. Dry drainage ditches filled with the oak leaves, and these were the places to shuffle through when *lunaris* would get up a few feet ahead, and if an immediate net stroke was unsuccessful a long and high-speed chase followed among the oak stools and with eyes well up, horrible falls were frequent. Anyhow Veronica was impressed by my speed! On July 16 we were back with Eric Classey to look for larvae and we found quite a lot both at Ham Street and at Woodchurch and of all sizes from 3/4 to full fed. They feed on the stool oak from the winter cutting, fully exposed in the hot sun and eat down the fresh young terminal shoots of the oak stools, a sign of their presence that soon is easy to notice.

In the summer of 1949 Eric Classey told us that the Robinson

brothers had rigged up a mercury vapour lamp and this was attracting moths to a degree never seen before and he, I and Veronica decided, Veronica having the know-how, to fit up one too, which we tried out at Ham Street on July 15th. This we plugged in to Mrs. Davison's cottage on the edge of the wood and ran a long cable to a suitable point. The light stood suspended on a tripod over two sheets. It was a warm close night and the result was dramatic. As a comparison we ran a Coleman petrol vapour lamp on a sheet in another part of the wood. We reckoned that 25 times as many moths came to the m.v. light, and this included species in numbers which we had previously only seen in ones and twos at the Coleman, such as *derivalis*, *fagi* and *quercifolia*, and *gnaphalii* which we had not yet come across. It also attracted other visiting entomologists who abandoned their own sheets to marvel at the continuous flow of insect arrivals. We were again at Ham Street with our m.v. light on July 29, 30 and 31 and again between Sept. 8 and 13 and on this occasion there was a blue light deep in the woods and there were the Robinson brothers and I think Robin Mere running their light off a petrol engine and generator. We could not let this go unchallenged so as soon as we were back in London we set about getting something similar. There were no neat little Japanese generators on the market then but we found a firm in Acton who could marry a Villiers engine to a generator and fix them in a frame suitable for handling. The trouble was that it was far too heavy to move singlehanded and although I could lift it out of the back of my car I could not lift it back in again and Veronica's presence was always required. While it was being prepared, and this took a long time, we had to continue to plug in to friendly houses. And how friendly the owners were! What we wanted to do often took some explaining but the answer was inevitably "yes", and a great deal of trouble was taken in opening up outhouses or windows to give access to our cables and to other acts from rich or poor. I remember the steaming plates of sausage and bacon which came from a sergeant's wife when we plugged in to some barracks at Ash Vale near Aldershot, or "I've cooked you a little fish" from a lady in West Wales, well after midnight; or when we were connected to an expensive house on the edge of Sandwich golf course and a dinner party was taking place and the men came out in their dinner jackets (with drinks) after the ladies had retired to the drawing room, or the stately home in Hampshire where ffennell and I had our light on the lawn and the owner came out to say good night "I'm going to bed now. You will find whisky in the Library when you need it." Of course there were disasters too. We were staying near Nairn at a farm guest house and plugged our light into a disused turkey hut and on testing there was a tremendous bang and a blue flash and a lot of smoke. The evening meal was nearly cooked. The proprietor explained to the guests that a cold meal would be substituted. A

guest said that she didn't mind provided she could have a nice cup of tea. No tea either! The farmer husband has not yet begun milking. No milking either. We had blown the main fuse and only the Electricity Board could replace it and with a considerable charge, waived by them when I explained the circumstances, but no tea, no milking, no collecting that night. On another occasion, much later as we then had a Robinson trap, we plugged into an Irish farmhouse. What we didn't notice was a tethered goat and that we were within the limits of its chain. The goat exploring its territory dragged its chain across and completely decapitated the trap.

Youden had taken about 20 *compta* dusking in his garden at Dover in 1948 and he was getting them again this year so they must have been established. Cockayne, Hedges and I decided to try too and we located a large strip of sweet william in the Connaught Nurseries on the hill above Dover, grown for the flower trade. "How many flower heads did we want to buy? "Provided we have access and the plants are not disturbed we will buy the lot!" After all Cockayne was in charge of the Tring Collection and shades of Rothschild were still about. I see I visited our strip on June 17, 18, 22, 24, 25, 26 and 28. Petrol was cheaper in those days! On most of these nights Cockayne came too, but the take was meagre. The time of flight was 9.15 to 10.15 and most could be caught without using a torch as the white band is quite conspicuous in flight. Females could be seen ovipositing into the crown of the flower head. On July 17 Classey, Veronica and I went again to Dover to cut off the seed heads and send them to Tring. This was quite a mammoth task and we filled a mattress cover which we tied on to the top of the dicky of my open car and took to Euston. Here Goodson met us (Goodson was Cockayne's assistant in looking after the Tring, later the R.C.K., collection). He had reserved a special carriage on the Tring train and when we had squeezed the mattress cover through the door it completely filled the carriage. The whole manoeuvre was quite unnecessary. Eric Classey quickly got about 40 full fed larvae in a garden in the town by the simple expedient of shaking the dead leaves and stalks and collecting the larvae from the ground round the base of the plant. Only small larvae were in the seed heads during the day.

Büttneri was discovered at Freshwater by Dr. Blair. The locality was a slightly brackish marsh of reed and sedge divided from the sea by a shingle bank and the coast road and continuing up a valley inland for about a quarter of a mile. Blair's house was conveniently positioned on its edge. My 1949 diary reads:—

"Sept. 28, 29, 30. Three nights with the m.v. light after *büttneri*. The first night was misty and still, the second too windy and the third clear and cool with heavy dew. I took 5, 5 and 3 = 13, almost all females, mostly in good condition. The majority came to light about 8.30 (though the normal flight would seem to be at late dusk

at 7.30). One came to light as late as 9.30, nothing after (Stedall stayed up till dawn). *Büttneri* flutters quietly toward the light like *palustris*, only one reached the sheet, the remainder fluttering in the grass. My light was in Mrs. Elliot-Ball's garden (on her lawn which sloped down to the marsh) which proved better than any of the other spots. 70 were taken this year by about a dozen collectors. Can it stand this drain?" (We shall never know as next year the marsh was destroyed.)

The reason I was more successful than the others was because I had my light on a lawn when any approaching moths would be seen and the others had their lights in or on the edge of the reed bed where the insect would have settled invisibly in the reeds or sedge some way back from the light. When wandering about in the marsh I found a female at rest on a dead reed leaf deep down in the litter. Every now and then one's eyes pick out something it is virtually impossible to spot and this was such an occasion. As I bent down to box it I remember thinking, how could I possibly have seen that? I take it that the dusk flight were the males as the flight when it was dark enough for the m.v. to be effective were almost all females and there probably was a predawn flight too. In 1949 we had no m.v. trap to test what flew after we went to bed.

Sacraria was common at the same time in the stubble fields above Freshwater. Bernard Kettlewell had thought of an ingenious way of collecting *sacraria* which we tried out together in the stubble round Cranleigh. You take about a 30 foot length of light rope to which you tie four or five heavy objects like spanners and the two of you tow this across the stubble fields in the manner of mine-sweeping and it is very effective but ideally you need a third man with a net behind the rope.

In 1950 I was at Dalwhinnie and there found *assimilis* in an abundance which I think has not been seen since. My diary reads: "July 30. Moved to Dalwhinnie. Weather was rough with high wind and rain. Debated going out at night but in the end put the m.v. light on the edge of the Dalwhinnie-Laggan road about 1½ miles beyond the hotel. As I always do in high winds, I had no sheet and put the light close down over the ground; insects then fly down on to the heather and hang on. otherwise they get swept away. 6 *assimilis* came of which I caught 5 (4 males, 1 female). All fresh except one, but they got incredibly quickly damaged and even the fresh ones are often scratched or torn."

"July 31. Same place. Sugared on the posts on the left of the road. Four *monoglypha* the only insects. Two *assimilis* at m.v. All to date have arrived between 11.15 and 11.45 B.S.T."

"Aug. 1. Since I came to the conclusion I did not know which of the grasses was the purple moor grass, the supposed food plant, I went to see the botanist Robert Adam, who put me wise. As the

result I moved my position to the best spot for this grass and obtained 27 *assimilis*. The night was windy with heavy showers. Nearly all were fresh though even these are often damaged. They nearly all came 11.00 to 11.20, mostly males. At one time they were coming so rapidly I could not cope with them all, fluttering in the heather with great vigour like *popularis* and I imagine that up to fifty came to light. At first there were no *monoglypha* but as *assimilis* stopped at midnight, *monoglypha* began to arrive in equal numbers. Did not sugar. A quick search of grass tufts produced no *assimilis* pairs. I think they sit on the bare peat."

"Aug. 2 and 3. Two more nights at the same spot. Both reasonably suitable. On the first night I brought back 17 selected *assimilis*, on the second 35. About 75% are in tip-top condition but one is liable to damage them boxing them in the heather. (I used the sheet for a short time but they then fly wildly round so I soon gave it up.) I doubt if one in ten are females. I sugared the roadside posts on both nights, only *monoglypha* and five *assimilis*. I also looked for pairs but could find none on herbage or the fence but I got two pairs on the wood poles of the power line which crosses the moor, also some single *assimilis* on the same poles including three on one pole."

Other collectors had found *assimilis* on this high moorland both before and after my visit but nothing like my numbers. These numbers may seem somewhat excessive but *assimilis* is widely spread over most areas of the northern Highlands and probably occurs in millions. My catch provided the R.C.K. collection with a very superior series.

I have not written anything about my frequent visits to Ireland, up to three in one year, first alone, then with Veronica and our three little daughters and finally to be joined by Austin Richardson after the death of his wife Beryl. We selected the most obscure and out-of-the-way places, generally on the coast, hoping to collect where no-one had collected before and thus find new species but though we added many new localities to Baynes' list the only species new to Ireland was *xanthomista* which I took at Castle Townshend in County Cork in an m.v. trap in the castle garden. As well as moths we had to consider the little daughters and their requirements were donkeys. I remember the necessary animal being produced by a bog farmer. Daughter (aged 5): "Oh but what a darling, darling donkey. What do you call it?" "I calls it ass." Places which satisfied all requirements were Malin Head, Portsalon (fine forms of *dahlii*), Portnoo (*caesia*) all in Donegal. The Mull of Belmullet and Achill Island (too many tourists) in Mayo. Roundstone (*N. algae*) in Connemara. Of course the Burren. Sleat Head, Valencia, Dursey Island, Mezin Head in Counties Kerry and Cork and all along the south coast to Rosslare. The interior was not neglected in hopeless search for *bicoloria*.

On May 28th 1954 Veronica and I stayed at Krugers Hotel at Dunquin on the extreme tip of the Dingle Peninsula. Dunquin was the Mecca of gaelic speakers and Krugers was where they stayed. Kruger himself was a German and the hotel flew the German flag but Gaelic was the only language which produced a satisfactory response. We had our m.v. light some two miles back from the headland where the cliff is precipitous enough to keep the sheep off the maritime campion which is one of their favourite foods. We left the generator at the top and scrambled down to a narrow ledge about three feet wide and surrounded with tufts of campion. Below the ledge the cliff fell vertically. We folded the sheet into a strip and shortened the legs of the m.v. tripod and lit the Coleman lamp. Dingle Bay spread out below us backed by the line of the Kerry Mountains. Great Blasket Island was to the right and the Skerries Stacks way out on the horizon of the open Atlantic. The next bit of land would be the U.S.A. As it became dark all this faded away but the noise of the birds and the sea reminded us of where we were. When it was pitch dark the shearwaters and the storm petrels would fly in to their nesting burrows making that extraordinary crowing and gurgling noise which is frightening in its uncanniness. The only thing that had not come was *caesia* so I decided to leave Veronica on the ledge and taking the Coleman make a quick dash to the sand dunes of Ventry Bay and see if I could find *ripae*. I went on foot. About halfway there I started to think. I had taken the Coleman lamp leaving Veronica with only the mercury vapour. Suppose it went out? She could not get up anyhow as the access to the ledge was on my side and the tripod blocked her off. I turned round and rushed back. As I crossed the field to the cliff top I could hear the engine; that's good! As I leant over the cliff edge I could see the blue glow of the light; that's good. I scrambled down. Veronica was busy with the pill boxes. "I've got eight *caesia*. They are even darker than you said." Earlier I wrote that I had married the ideal entomologist's wife: well you see what I mean! We stayed till the light began to show over the MacGillicuddy's Reeks. When we got back to Dunquin it was full daylight and the sea was silver blue and every field resounded to the croak of comcrakes.

Why do I do it? No scientific paper on the structure of the sclerite has been produced. No insect new to science, or even to the British Isles has been discovered. My only claim to fame is the melanic form of the Green Arches, *Anaplectoides prasina* ab. *demuthi* and the possibility that I know as much of the distribution of the British noctuidae as anyone else. I cannot even introduce myself as I once heard Austin Richardson do so to a lepidopterist in Benbecula in the Hebrides: "My name is Richardson. I have the finest collection of British lepidoptera in private hands", and so he had. No it's none of those things. It is a desire, almost a passion, to be in remote and wild places and moths are the spur that drives me to

them. Who but an entomologist would have stood on the summit of Schiehallion watching the sun set over Rannoch Moor or on Herma Ness in Unst, the final northern extremity of the British Isles and while examining his sugar seen the *aurora borealis* flickering up and down over the arctic horizon? Or sleep in the car (our large estate car with a mattress in the back and two sleeping bags is very snug) in a ride in the New Forest and wake just as the sun is up with the shadows of the tree trunks striping the grass and a herd of deer browsing all around?

My thanks to Jane Goater for so neatly doing the typing and correcting most of the spelling faults.

Notes and Observations

A THOUGHT FOR THE FEMINIST. — The value of ladies, suitably attired, on field trips, has long been recognised (Allan, 1948, *Moths & Memories*, p.125). A long white dress makes an excellent substitute for a sheet whilst collecting moths, the lamp being shone on the lady whilst she stands still. Though perhaps P.M.B. Allan's suggestion (*op. cit.*), that she may be persuaded to stand knee deep in water at the edge of a pond, in order to attract *Nonagria typhae*, is perhaps a little ungentlemanly. The same long dress also makes an excellent beating tray, if she can be persuaded to sit beneath the tree and spread her skirts out to catch the falling insects, a wide brimmed hat is essential!!

As well as these useful techniques I believe I have discovered a new one. At a wedding I attended recently the bridesmaids were wearing wide hooped skirts with an over-skirt of net. As they walked through the grass in the church yard and at the reception, several small insects were disturbed by the hems of the dresses and caught under the net overskirts. On the one bridesmaid, which I was able to examine more closely, I noted three different species of diptera and two of hemiptera.

This technique would probably be useful in sampling a population of small insects in long grass. I offer the idea to some enterprising student who might like to develop it further. — G. F. Le PARDE, Silver Crest, Silver St., Sway, Lymington, Hampshire.

DONACIA VULGARIS ZSCHACH (COL.: CHRYSOMELIDAE) IN CUMBRIA. — Dotted around the small town of Egremont in West Cumbria are a number of old disused iron ore mines, many of which were worked out and abandoned long ago. These areas have remained derelict and undisturbed and due to subsidence a number of the old workings have flooded and this has resulted in the creation of large ponds. Over the years many of these ponds have been colonised by a good deal of aquatic vegetation which has in turn created some very interesting habitats for invertebrates and wildlife in general.

While doing some collecting on 27th June, 1981 at one of these